AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously presented) A chimeric peptide comprising an agonist μ opioid receptor binding moiety at its N-terminus and an agonist Substance P receptor binding moiety at its C-terminus, wherein said peptide induces analgesia.

Claims 2-28 (Canceled)

Claim 29 (Previously presented) The peptide of claim 1 wherein the N-terminal amino acid residue of said opioid receptor binding moiety is a free amine.

Claim 30 (Previously presented) The peptide of claim 29 wherein the N-terminal amino acid residue of said opioid receptor binding moiety is Tyr.

Claim 31 (Currently amended) The peptide of claim 30 wherein said opioid receptor binding moiety is a peptide having any one of SEQ ID Nos: 1-11, or ~~an~~ N-terminal fragment ~~or N-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of any one of SEQ ID Nos: 1-11 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist~~.

Claim 32 (Currently amended) The peptide of claim 30 wherein said opioid receptor binding moiety is endomorphin 1, endomorphin 2, or ~~an~~ N-terminal fragment~~, or an N-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of endomorphin 1 or endomorphin 2 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist~~.

Claim 33 (Currently amended) The peptide of claim 32 wherein said opioid receptor binding moiety is a peptide having SEQ ID No: 2 or 3, or ~~an~~ N-terminal fragment ~~or N-~~

~~terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of SEQ ID No: 2 or 3 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist~~.

Claims 34-44 (Canceled)

Claim 45 (Currently amended) The peptide of claim 1, wherein said agonist Substance P receptor binding moiety comprises Substance P, or ~~a~~ C-terminal Substance P fragment~~, or a C-terminal Substance P derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of Substance P by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a Substance P receptor agonist~~.

Claim 46 (Previously presented) The peptide of claim 1, wherein the –COOH moiety of the C-terminal amino acid residue of said Substance P receptor binding moiety is protected.

Claim 47 (Previously presented) The peptide of claim 46 wherein the –COOH moiety of the C-terminal amino acid residue of said Substance P receptor binding moiety is amidated.

Claim 48 (Previously presented) The peptide of claim 47 wherein the C-terminal amino acid residue of said Substance P receptor binding moiety is Met-NH_2.

Claim 49 (Currently amended) The peptide of claim 48 wherein said Substance P receptor binding moiety is a peptide having any one of SEQ ID Nos: 21, 36 and 38-41, or ~~a~~ C-terminal fragment ~~or C-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of any one of SEQ ID Nos: 21, 36 and 38-41 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a Substance P receptor agonist~~.

Claims 50-56 (Canceled)

Claim 57 (Currently amended) ~~The peptide of claim 1 wherein~~

~~the opioid receptor binding moiety is endomorphin 1, endomorphin 2, or an N-terminal fragment or N-terminal derivative thereof; wherein the derivative is obtained by alteration of the amino acid sequence of endomorphin 1 or endomorphin 2 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist; and~~

~~the Substance P receptor binding moiety is Substance P, or a C-terminal fragment or a C-terminal Substance P derivative thereof; wherein the derivative is obtained by alteration of the amino acid sequence of Substance P by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a Substance P receptor agonist.~~

The peptide of claim 1 wherein the opioid receptor binding moiety is endomorphin 1, endomorphin 2, or N-terminal fragment thereof; and the Substance P receptor binding moiety is Substance P, or C-terminal fragment thereof.

Claim 58 (Previously presented) The chimeric peptide of claim 1 wherein the peptide has SEQ ID No: 42.

Claim 59 (Previously presented) The chimeric peptide of claim 1 wherein the peptide has SEQ ID No: 43.

Claims 60-61 (Canceled)

Claim 62 (Previously presented) A pharmaceutical composition comprising the peptide of claim 1 and a pharmaceutically acceptable diluent.

Claim 63 (Previously presented) The pharmaceutical composition of claim 62, further

comprising an adjuvant.

Claims 64-69 (Canceled)

Claim 70 (Previously presented) The pharmaceutical composition of claim 62 wherein the N-terminal amino acid residue of said opioid receptor binding moiety is a free amine.

Claim 71 (Previously presented) The pharmaceutical composition of claim 70 wherein the N-terminal amino acid residue of said opioid receptor binding moiety is Tyr.

Claim 72 (Currently amended) The pharmaceutical composition of claim 71 wherein said opioid receptor binding moiety is a peptide having any one of SEQ ID Nos: 1-11, or ~~an~~ N-terminal fragment ~~or N-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of any one of SEQ ID Nos: 1-11 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist~~.

Claim 73 (Currently amended) The pharmaceutical composition of claim 71 wherein said opioid receptor binding moiety is endomorphin 1, endomorphin 2, or ~~an~~ N-terminal fragment~~, or an N-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of endomorphin 1 or endomorphin 2 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist~~.

Claim 74 (Currently amended) The pharmaceutical composition of claim 73 wherein said opioid receptor binding moiety is a peptide having SEQ ID No: 2 or 3, or ~~an~~ N-terminal fragment ~~or N-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of SEQ ID No: 2 or 3 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist~~.

Claims 75-85 (Canceled)

Claim 86 (Currently amended) The pharmaceutical composition of claim 62, wherein said agonist Substance P receptor binding moiety comprises Substance P, or ~~a~~ C-terminal Substance P fragment~~, or a C-terminal Substance P derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of Substance P by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a Substance P receptor agonist~~.

Claim 87 (Previously presented) The pharmaceutical composition of claim 62, wherein the –COOH moiety of the C-terminal amino acid residue of said Substance P receptor binding moiety is protected.

Claim 88 (Previously presented) The pharmaceutical composition of claim 87 wherein the –COOH moiety of the C-terminal amino acid residue of said Substance P receptor binding moiety is amidated.

Claim 89 (Previously presented) The pharmaceutical composition of claim 88 wherein the C-terminal amino acid residue of said Substance P receptor binding moiety is Met-NH_2.

Claim 90 (Currently amended) The pharmaceutical composition of claim 89 wherein said Substance P receptor binding moiety is a peptide having any one of SEQ ID Nos: 21, 36 and 38-41, or a C-terminal fragment ~~or C-terminal derivative~~ thereof~~; wherein the derivative is obtained by alteration of the amino acid sequence of any one of SEQ ID Nos: 21, 36 and 38-41 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a Substance P receptor agonist~~.

Claims 91-97 (Canceled)

Claim 98 (Currently amended) ~~The pharmaceutical composition of claim 62 wherein~~

~~the opioid receptor binding moiety is endomorphin 1, endomorphin 2, or an N-terminal fragment or N-terminal derivative thereof; wherein the derivative is obtained by alteration of the amino acid sequence of endomorphin 1 or endomorphin 2 by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a μ opioid receptor agonist; and~~

~~the Substance P receptor binding moiety is Substance P, or a C-terminal fragment or a C-terminal Substance P derivative thereof; wherein the derivative is obtained by alteration of the amino acid sequence of Substance P by substitution, addition or deletion of one or more amino acids, whereby the derivative is at least 4 amino acid residues long and is a Substance P receptor agonist.~~

The pharmaceutical composition of claim 62 wherein the opioid receptor binding moiety is endomorphin 1, endomorphin 2, or N-terminal fragment thereof; and the Substance P receptor binding moiety is Substance P, or C-terminal fragment thereof.

Claim 99 (Previously presented) The pharmaceutical composition of claim 62 wherein the peptide has SEQ ID No: 42.

Claim 100 (Previously presented) The pharmaceutical composition of claim 62 wherein the peptide has SEQ ID No: 43.

Claims 101-102 (Canceled)